Star LED DMX

ORDERCODE 43064

SHOWELECTRONICS FOR PROFESSIONALS

Congratulations!
You have bought a great, innovative product from Showtec.
The Showtec Star LED DMX brings excitement to any venue. Whether you want simple plug-&-play action or a sophisticated DMX show, this product provides the effect you need.

You can rely on Showtec, for more excellent lighting products.
We design and manufacture professional light equipment for the entertainment industry.
New products are being launched regularly. We work hard to keep you, our customer, satisfied.
For more information: iwant@showtec.info

You can get some of the best quality, best priced products on the market from Showtec.
So next time, turn to Showtec for more great lighting equipment.
Always get the best -- with Showtec !

Thank you!

Showtec

Showtec Star LED DMX™ Product Guide

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WARNING

FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY BEFORE YOUR INITIAL START-UP!

Unpacking Instructions

Immediately upon receiving this product, carefully unpack the carton and check the contents to ensure that all parts are present, and have been received in good condition. Notify the dealer immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the oriainal factory box and packing.

Your shipment includes:

- Showtec Star LED DMX with powercable 0,75m
- Bracket included
- User manual

LED Expected Lifespan

LEDs gradually decline in brightness over time. HEAT is the dominant factor that leads to the acceleration of this decline. Packaged in clusters, LEDs exhibit higher operating temperatures than in ideal or singular optimum conditions. For this reason when all color LEDs are used at their fullest intensity, life of the LEDs is significantly reduced. It is estimated that a viable lifespan of 40,000 to 50,000 hours will be achieved under normal operational conditions. If improving on this lifespan expectancy is of a higher priority, place care in providing for lower operational temperatures. This may include climatic-environmental and the reduction of overall projection intensity.

CAUTION!
Keep this device away from rain and moisture!
Unplug mains lead before opening the housing!

SAFETY INSTRUCTIONS

Every person involved with the installation, operation and maintenance of this device has to:

- be qualified
- follow the instructions of this manual

CAUTION! Be careful with your operations.
With a dangerous voltage you can suffer
a dangerous electric shock when touching the wires!

Before your initial start-up, please make sure that there is no damage caused by transportation. Should there be any, consult your dealer and do not use the device.

To maintain perfect condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this manual.

Please consider that damages caused by manual modifications to the device are not subject to warranty.

This device contains no user-serviceable parts. Refer servicing to qualified technicians only.

IMPORTANT:

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the device.

- Never let the power-cord come into contact with other cables! Handle the power-cord and all connections with the mains with particular caution!
- Never remove warning or informative labels from the unit.
- Do not open the device and do not modify the device.
- Never use anything to cover the ground contact.
- Never leave the device run without a lamp!
- Never look directly into the light source.
- Never leave any cables lying around.
- Do not insert objects into air vents.
- Do not connect this device to a dimmerpack.
- Do not switch the device on and off in short intervals, as this would reduce the device's life.
- Do not shake the device. Avoid brute force when installing or operating the device. The Star LED DMX reacts very sensitive to movement.
- Never use the device during thunderstorms, unplug the device immediately.
- Only use device indoor, avoid contact with water or other liquids.
- Do not touch the device's housing bare-handed during its operation (housing becomes hot).
- Only operate the device after having familiarized with its functions.
- Avoid flames and do not put close to flammable liquids or gases.
- Always keep case closed while operating.
- Always allow free air space of at least 50 cm around the unit for ventilation.
- Always disconnect power from the mains, when device is not used or before cleaning! Only handle the power-cord by the plug. Never pull out the plug by tugging the power-cord.
- Make sure that the device is not exposed to extreme heat, moisture or dust.
- Only install the device with the hanging-bracket.
- Make sure that the available voltage is not higher than stated on the rear panel.
- Make sure that the power-cord is never crimped or damaged. Check the device and the power-cord from time to time.
- If the external cable is damaged, it has to be replaced by a qualified technician.
- If the lens or glass is obviously damaged, it has to be replaced. So that its functions are not impaired, due to cracks or deep scratches.
- If device is dropped or struck, disconnect mains power supply immediately. Have a qualified engineer inspect for safety before operating.
- If the device has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.
- If your Showtec device fails to work properly, discontinue use immediately. Pack the unit securely (preferably in the original packing material), and return it to your Showtec dealer for service.
- For adult use only. Lighteffect must be installed out of the reach of children. Never leave the unit running unattended.
- For replacement use fuses of same type and rating only.
- Allow time to cool down, before replacing lamp.
- The user is responsible for correct positioning and operating of the Star LED DMX. The manufacturer will not accept liability for damages caused by the misuse or incorrect installation of this device.
- This device falls under protection class I. Therefore it is essential to connect the yellow/green conductor to earth.
- During the initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective.
- Repairs, servicing and electric connection must be carried out by a qualified technician.
- WARRANTY: Till one year after date of purchase.

CAUTION ! EYEDAMAGES !.
Avoid looking directly into the light source.
(meant especially for epileptics) !

OPERATING DETERMINATIONS

This device is not designed for permanent operation. Consistent operation breaks will ensure that the device will serve you for a long time without defects.

The minimum distance between light-output and the illuminated surface must be more than 0,5 meters.

The maximum ambient temperature t_a = 45°C must never be exceeded.

The relative humidity must not exceed 50 % with an ambient temperature of 45° C.

If this device is operated in any other way, than the one described in this manual, the product may suffer damages and the warranty becomes void.
Any other operation may lead to dangers like short-circuit, burns, electric shock, lamp explosion, crash etc.

You endanger your own safety and the safety of others!

Rigging

Please follow the European and national guidelines concerning rigging, trussing and all other safety issues.

Do not attempt the installation yourself !
Always let the installation be carried out by an authorized dealer !

Procedure:

- If the Star LED DMX is lowered from the ceiling or high joists, professional trussing systems have to be used.
- Use a clamp to mount the Star LED DMX, with the mounting-bracket, to the trussing system.
- The Star LED DMX must never be fixed swinging freely in the room.
- The installation must always be secured with a safety attachment, e.g. an appropriate safety net or safety-cable.
- When rigging, derigging or servicing the device, always make sure, that the area below the installation place is blocked and staying in the area is forbidden.

Improper installation can cause serious damage to people and property !

Connection with the mains

Connect the device to the mains with the power-plug.
Always pay attention, that the right color cable is connected to the right place.

International	EU Cable	UK Cable	US Cable	Pin
L	BROWN	RED	YELLOW/COPPER	FASE
N	BLUE	BLACK	SILVER	NUL
⏚	YELLOW/GREEN	GREEN	GREEN	EARTH

Make sure that the device is always connected properly to the earth!

⚠ Return Procedure ⚠

Returned merchandise must be sent prepaid and in the original packing, call tags will not be issued. Package must be clearly labeled with a Return Authorization Number (RMA number). Products returned without an RMA number will be refused. Highlite will not accept the returned goods or any responsibility. Call Highlite 0031-455667723 or mail aftersales@highlite.nl and request an RMA prior to shipping the fixture. Be prepared to provide the model number, serial number and a brief description of the cause for the return. Be sure to properly pack fixture, any shipping damage resulting from inadequate packaging is the customer's responsibility. Highlite reserves the right to use its own discretion to repair or replace product(s). As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

Note: If you are given an RMA number, please include the following information on a piece of paper inside the box:

1) Your name
2) Your address
3) Your phone number
4) A brief description of the symptoms

Claims

The client has the obligation to check the delivered goods immediately upon delivery for any short-comings and/or visible defects, or perform this check after our announcement that the goods are at their disposal. Damage incurred in shipping is the responsibility of the shipper; therefore the damage must be reported to the carrier upon receipt of merchandise.

It is the customer's responsibility to notify and submit claims with the shipper in the event that a fixture is damaged due to shipping. Transportation damage has to be reported to us within one day after receipt of the delivery.

Any return shipment has to be made post-paid at all times. Return shipments must be accompanied with a letter defining the reason for return shipment. Non-prepaid return shipments will be refused, unless otherwise agreed in writing.

Complaints against us must be made known in writing or by fax within 10 working days after receipt of the invoice. After this period complaints will not be handled anymore.

Complaints will only then be considered if the client has so far complied with all parts of the agreement, regardless of the agreement of which the obligation is resulting.

Description of the device

Features

The Showtec Star LED DMX is a light effect with high output and great effects.

- Power consumption: 15 Watt
- LED system: 1x RGB (3in1) 9 Watt with chip on board
- 34 Beams
- Beam angle: 140 degrees
- DMX Control
- DMX Channels: 4
- Digital Adressing
- Music-controlled via built-in microphone
- High power LED-effect
- Rotation: 10 rpm
- Plug & Play
- Stand-alone
- Fuse 1A / 250V

Overview

Fig. 1

1) 3-pin DMX In
2) 3-pin DMX Out
3) Built-in microphone
4) Fuse 1A 250V
5) Power cable
6) LCD Display with menu buttons

Set Up and Operation

Before plugging the unit in, always make sure that the power supply matches the product specification voltage. Do not attempt to operate a 120V specification product on 230V power, or vice versa.

Remove all packing materials from the Star LED DMX. Check that all foam and plastic padding is removed.

Always disconnect from electric mains power supply before cleaning or servicing.
Damages caused by non-observance are not subject to warranty.

Control Modes

One Star LED (Manual Control)

1. Fasten the effect light onto firm trussing. Leave at least 0,5 meter on all sides for air circulation.
2. When the Star LED is not connected by a DMX-cable, it functions as a stand-alone device.
Please see page 12 for more information about the manual control mode.

One Star LED (Sound-control)

1.Plug the end of the electric mains power cord into a proper electric power supply socket.
2. Turn on the music. If device is set to SoUn (Audio) and you have pressed enter, then the fixture will react to the beat of the music. Please see page 13 for more information about the sound-control options.

Multiple Star LEDs (Master/Slave control)

1. Fasten the effect light onto firm trussing. Leave at least 0,5 meter on all sides for air circulation.
2. Use a 3-p XLR cable to connect the Star LED.
The pins:

1. Earth
2. Signal -
3. Signal +

3. Link the units as shown in (Fig. 2), Connect a DMX signal cable from the first unit's DMX "out" socket to the second unit's "in" socket. Repeat this process to link the second, third, and fourth units. You can use the same functions on the master device as described on page 7 (Manual control or Music control). This means on the master device you can set your desired operation Mode and all slave devices will react the same as the master device.

Multiple Star LEDs (Master/Slave control)

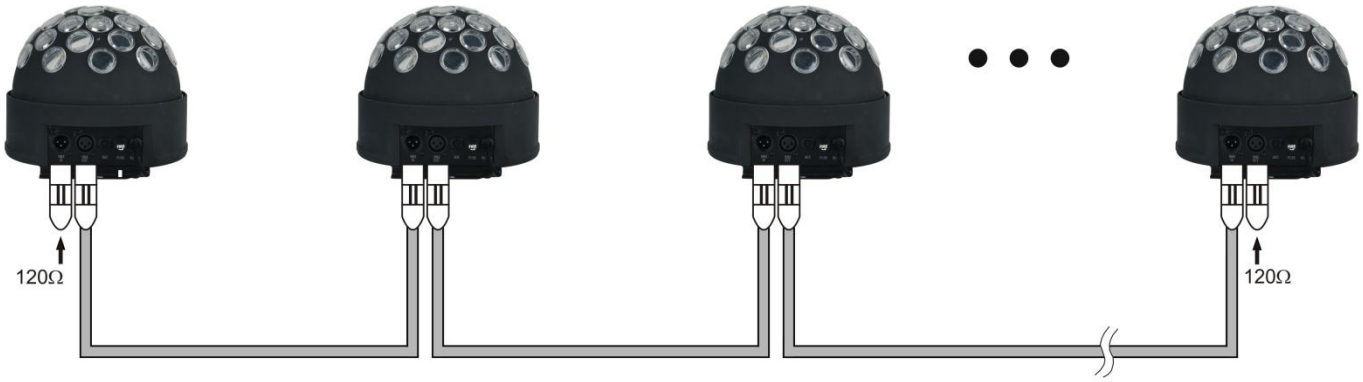


Fig. 2

Multiple Star LEDs (DMX Control)

1. Fasten the effect light onto firm trussing Leave at least 1 meter on all sides for air circulation.
2. Always use a safety cable (ordercode 70140 / 70141).
3. Use a 3-p XLR cable to connect the Star LEDs and other devices.

Occupation of the XLR-connection:

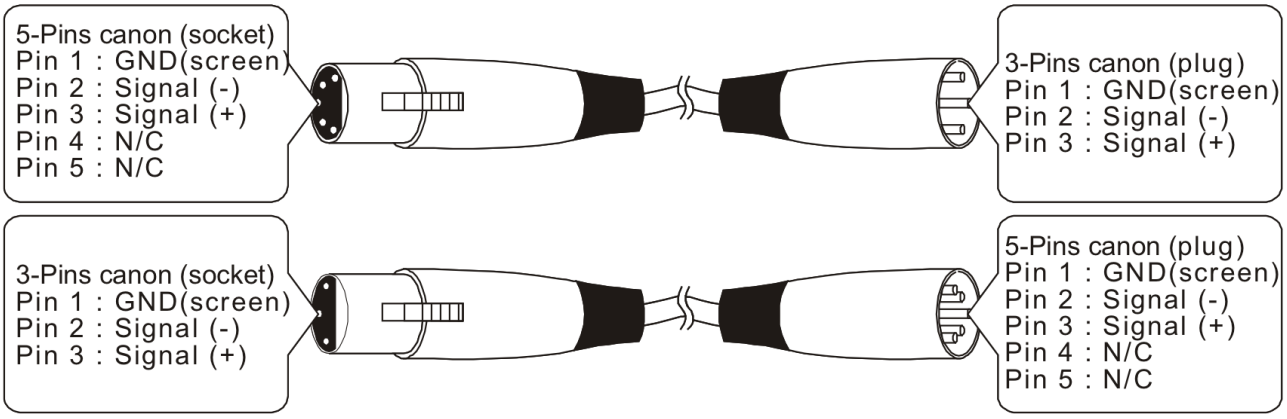
DMX-OUTPUT
XLR mounting-socket:

1 - Ground
2 - Signal (-)
3 - Signal (+)

DMX-input
XLR mounting-plug

1 - Ground
2 - Signal (-)
3 - Signal (+)

The transformation of the controller line of 3 pins and 5 pins (plug and socket)


5-Pins canon (socket)
Pin 1 : GND(screen)
Pin 2 : Signal (-)
Pin 3 : Signal (+)
Pin 4 : N/C
Pin 5 : N/C
3-Pins canon (plug)
Pin 1 : GND(screen)
Pin 2 : Signal (-)
Pin 3 : Signal (+)
3-Pins canon (socket)
Pin 1 : GND(screen)
Pin 2 : Signal (-)
Pin 3 : Signal (+)
5-Pins canon (plug)
Pin 1 : GND(screen)
Pin 2 : Signal (-)
Pin 3 : Signal (+)
Pin 4 : N/C
Pin 5 : N/C

4. Link the units as shown in (figure 3), Connect a DMX signal cable from the first unit's DMX "out" socket to the second unit's "in" socket. Repeat this process to link the second, third, and fourth units.
5. Supply electric power: Plug electric mains power cords into each unit's IEC socket, then plug the other end of the mains power cord into proper electric power supply sockets, starting with the first unit. Do not supply power before the whole system is set up and connected properly.

Multiple Star LEDs DMX Set Up

Fig. 3

Note : Link all cables before connecting electric power

Fixture Linking

You will need a serial data link to run light shows of one or more fixtures using a DMX-512 controller or to run synchronized shows on two or more fixtures set to a master/slave operating mode. The combined number of channels required by all the fixtures on a serial data link determines the number of fixtures the data link can support.

Important: Fixtures on a serial data link must be daisy chained in one single line. To comply with the EIA-485 standard no more than 30 devices should be connected on one data link. Connecting more than 30 fixtures on one serial data link without the use of a DMX optically isolated splitter may result in deterioration of the digital DMX signal.

Maximum recommended DMX data link distance: 100 meters
Maximum recommended number of Star LEDs on a DMX data link: 30 fixtures

Data Cabling

To link fixtures together you must obtain data cables. You can purchase DAP Audio certified DMX cables directly from a dealer/distributor or construct your own cable. If you choose to create your own cable please use data-grade cables that can carry a high quality signal and are less prone to electromagnetic interference.

DAP Audio Certified DMX Data Cables

- DAP Audio cable for allround use. bal. XLR/M 3 p. > XLR/F 3 p.
  Ordercode FL01150 (1,5m.), FL013 (3m.), FL016 (6m.), FL0110 (10m.), FL0115 (15m.), FL0120 (20m.).
- DAP Audio cable for the demanding user with exceptional audio-qualities and connector made by Neutrik®. **Ordercode** FL71150 (1,5m.), FL713 (3m.), FL716 (6m.), FL7110 (10m.).

The Star LED can be operated with a controller in **control mode** or without the controller in **stand-alone mode.**

Control Panel

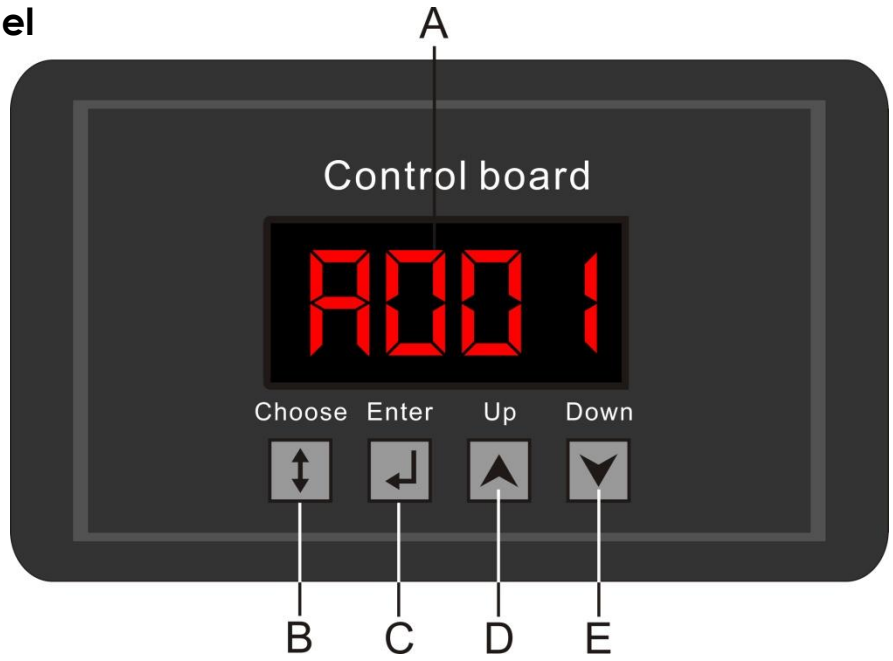


Fig. 4

A. LCD Display
B. CHOOSE button
C. ENTER Button
D. Up Button
E. Down Button

DMX Control Mode

The fixtures are individually addressed A001 - A511 on a data-link and connected to the controller. The fixtures respond to the DMX signal from the controller. (When you select the DMX address and save it, the controller will display the saved DMX address the next time.)

DMX Addressing

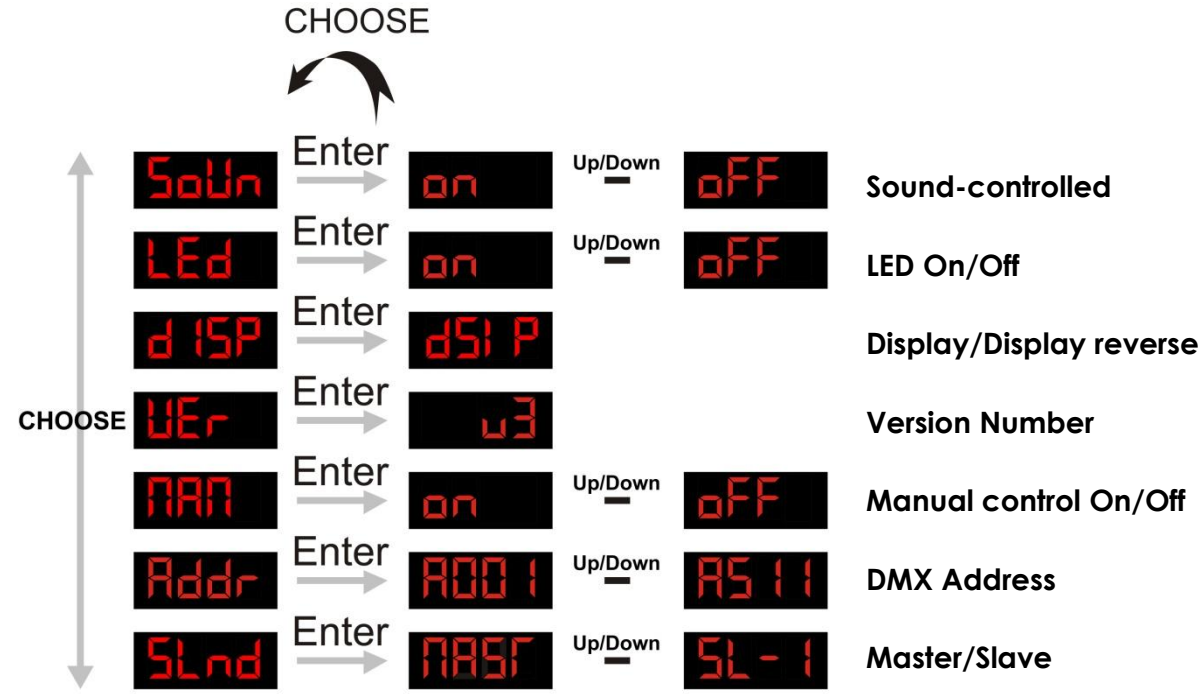
The control panel on the front side of the Star LED allows you to assign the DMX fixture address, which is the first channel from which the Star LED will respond to the controller.
Please note when you use the controller, the unit has **4** channels.
When using multiple Star LEDs, make sure you set the DMX addresses right.
Therefore, the DMX address of the first Star LED should be **1(A001)**; the DMX address of the second Star LED should be **1+4=5 (A005**); the DMX address of the third Star LED should be **5+4=9 (A009)**, etc. Please, be sure that you don't have any overlapping channels in order to control each Star LED correctly.
If two or more Star LEDs are addressed similarly, they will work similarly.
For address settings, please refer to the instructions under "Addressing' (menu A001)

Controlling:

After having addressed all Star LED fixtures, you may now start operating these via your lighting controller.
Note: After switching on, the Star LED will automatically detect whether DMX 512 data is received or not. If there is no data received at the DMX-input, the "**LED** " on the control panel will not flash.
The problem may be:
- The XLR cable from the controller is not connected with the input of the Star LED.
- The controller is switched off or defective, the cable or connector is detective, or the signal wires are swapped in the input connector.

Note: It's necessary to insert a XLR termination plug (with 120 Ohm) in the last fixture in order to ensure proper transmission on the DMX data link.

Menu Overview



When you have selected On in Manual Mode, you will see an extra menu when you press choose !!

Main Menu Options

DMX Addressing

With this menu you can set the DMX address.

1) Press Choose, until the display shows Addr .

2) Press Enter to confirm. You can choose 512 different DMX addresses.

Use the Up / Down buttons to select the required address from A001 Up/Down A511 .

3) Once you have set the desired DMX address, press the enter button to store your DMX address.

LED On/Off

With this menu you can set the display On/Off

1) Press On and the display will always be on.

2) Press Off and the display will dim after 1 minute.

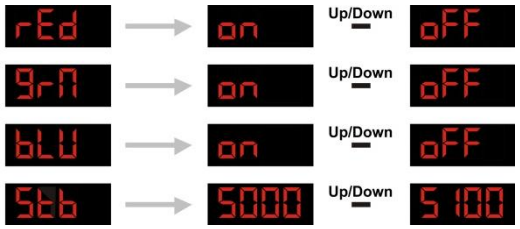
Manual Mode

When the display shows : MAN ,then press ENTER. The display will show on or oFF .

Use the Up/Down button to set the device to on . The device is now in Manual Mode.

Now press the Choose button to scroll through the menu.

A new menu has appeared:



You are able to manually create a few colors by combining Red, Green and Blue together.

Set the desired color to On to create this effect. Furthermore you can also activate the strobe function.

S000 = NO STROBE and S100 = Strobe 20Hz

Note: Manual Mode set to On = No Rotation
Manual Mode set to Off = Rotation

Sound-controlled Mode

When the display shows : SoUn ,then press ENTER. The display will show on or oFF .
Use the Up/Down button to set the device to on . The device is now sound-controlled and will react to the music.

⚠ **Do not set manual to On, when you are in Sound Mode** ⚠

Master Mode

When the display shows : SLnd ,then press ENTER. The display will show nASt or SL-1 .
Use the Up/Down button to set the device to nASt . The device is now the master device and all the slave devices will react the same as its master.

Note: When the device has been set to nASt , the device will react as a stand-alone device with a clockwise/counterclockwise (CW/CCW) color switch.

Slave Mode

When the display shows : SLnd ,then press ENTER. The display will show nASt or SL-1 .
Use the Up/Down button to set the device to SL-1 . The device is now a slave device. It will now react the same as its master.

Display Mode

When the display shows : d ISP ,the device is in normal Display Mode.

When you press Enter. The display will show dSI P . The Display function is reversed.

DMX Channels

Channel 1 - Colors

0-19	No Function
20-39	Red
40-59	Green
60-79	Blue
80-99	Cyan
100-119	Magenta
120-139	Yellow
140-159	White
160-179	Clockwise (CW) Color switch
180-199	Counterclockwise (CCW) Color switch
200-255	Sound-controlled Color switch with Clockwise + Counterclockwise (CW+CCW) rotation

Channel 2 – Colors/Auto Program

0-4	No Function
5-28	Red
29-56	Green
57-84	Blue
85-112	Cyan
113-140	Magenta
141-168	Yellow
169-197	White
198-255	Auto Program with only color switch and no rotation

Channel 3 – Strobe (⚠ You can only use CH3 in combination with CH2 ⚠)

0-4	No Function
5-254	Strobe function from slow to fast
255	Sound-controlled

Channel 4 –Rotation

0-127	Clockwise (CW) rotation from slow to fast
128-132	No Rotation
133-249	Counterclockwise (CCW) rotation from slow to fast
250-255	No Rotation

Maintenance

The Showtec Star LED DMX requires almost no maintenance. However, you should keep the unit clean. Otherwise, the fixture's light-output will be significantly reduced. Disconnect the mains power supply, and then wipe the cover with a damp cloth. Do not immerse in liquid. Wipe lens clean with glass cleaner and a soft cloth. Do not use alcohol or solvents. Keep connections clean. Disconnect electric power, and then wipe the connections with a damp cloth. Make sure connections are thoroughly dry before linking equipment or supplying electric power.

The operator has to make sure that safety-relating and machine-technical installations are to be inspected by an expert after every four years in the course of an acceptance test.
The operator has to make sure that safety-relating and machine-technical installations are to be inspected by a skilled person once a year.

The following points have to be considered during the inspection:

1. All screws used for installing the device or parts of the device have to be tightly connected and must not be corroded.
2. There may not be any deformations on housings, fixations and installation spots.
3. Mechanically moving parts like axles, eyes and others may not show any traces of wearing.
4. The electric power supply cables must not show any damages or material fatigue.

Replacing a Fuse

Power surges, short-circuit or inappropriate electrical power supply may cause a fuse to burn out. If the fuse burns out, the product will not function whatsoever. If this happens, follow the directions below to do so.

1. Unplug the unit from electric power source.
2. Insert a screwdriver into the slot in the fuse cover. Turn the screwdriver to the left, at the same time gently push a bit (Turn and Push). The fuse will come out.
3. Remove the used fuse. If brown or unclear, it is burned out.
4. Insert the replacement fuse into the holder where the old fuse was. Reinsert the fuse cover. Be sure to use a fuse of the same type and specification. See the product specification label for details.

Troubleshooting

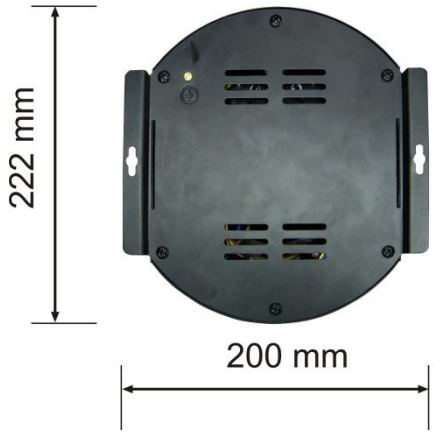
No Light, No Movement - All Products

This troubleshooting guide is meant to help solve simple problems. If a problem occurs, carry out the steps below in sequence until a solution is found. Once the unit operates properly, do not carry out following steps.
If the light effect does not operate properly, refer servicing to a technician.
Response: Suspect two potential problem areas: the power supply, the fuse.

1. Power supply. Check that the unit is plugged into an appropriate power supply.
2. The fuse. Replace the fuse. See page 15 for replacing the fuse.

Product Specification

Model: Showtec Star LED DMX
Power: 240V-50Hz (CE)
Power consumption: 15 Watt
LED system: 1x RGB (3in1) 9 Watt with chip on board
34 Beams
Beam angle: 140 degrees
DMX Control
Digital Addressing
Music-controlled via built-in microphone
High power LED-effect
Rotation: 10 rpm
Plug & Play
Stand-alone
Fuse 1A / 250V
Dimensions: 222x220x176mm (DxH)
Weight: 1,44 kg



Minimum distance:
Minimum distance from flammable surfaces: 0.5m
Minimum distance to lighted object: 0.8m

Design and product specifications are subject to change without prior notice.

CE

Website: www.Showtec.info
Email: service@highlite.nl

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